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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/571,618	03/10/2006	Tomoko Iiyama	069804-0118	4801
53080	7590	12/04/2007	EXAMINER	
MCDERMOTT WILL & EMERY LLP			SCHWARTZ, JORDAN MARC	
600 13TH STREET, NW			ART UNIT	PAPER NUMBER
WASHINGTON, DC 20005-3096			2873	
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12/04/2007		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/571,618	IIYAMA ET AL.	
	<b>Examiner</b> Jordan M. Schwartz	<b>Art Unit</b> 2873	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-3,5 and 7-10 is/are rejected.
- 7) Claim(s) 4 and 6 is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 10 March 2006 is/are: a) accepted or b) objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO/SB/08)  
 Paper No(s)/Mail Date 3/06.
- 4) Interview Summary (PTO-413)  
 Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### ***Priority***

Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent Application No. PCT/JP04/13566, filed on September 10, 2004.

### ***Specification***

The abstract of the disclosure is objected to because it is too long. Specifically, the abstract cannot exceed 150 words and 15 lines. Correction is required. See MPEP § 608.01(b).

### ***Claim Objections***

Claims 1 and 3-5 are objected to for the following reasons. The use of the parentheses in the claims create a lack of clarity since it is not clear if what is set forth in the parentheses are intended as limitations or not. Presumably they are intended as limitations and it is suggested that the parentheses be deleted. For example, in claim 1, changing "to d-line (mm)" to "to d-line in mm".

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-3, 5, 7-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nanba patent number 7,035,023.

Nanba discloses the limitations therein including the following: with respect to independent claim 1, Nanba discloses an imaging lens system (column 1, lines 6-9); for forming an image of an object onto a light receiving surface of a solid-state sensor (column 5, line 65 to column 6, line 20); comprising in order from an object side, an aperture diaphragm (example 3 and corresponding Figure 5, "Sp"); a first lens element of positive power with a convex surface on the image side (example 3 and corresponding Figure 5, "L1"); a second lens element having negative optical power and being meniscus with a concave object side shape (example 3 and corresponding Figure 5, "L2"); a third lens element having a positive power and being meniscus with a convex object side shape (example 3 and corresponding Figure 5, "L3"); the satisfaction of conditional expression "2" (example 3, column 25, Table 3 with  $fd/f3d = 0.51$ ); satisfaction of the conditional expression "3" (example 3, with the condition = -1.84); and satisfaction of the conditional expression "4" (example 3 with the condition = -1.80).

With respect to claim 1, Nanba discloses as is set forth above including disclosing  $|fd/f2d| = 2.3$  (example 3) and therefore just outside of the claimed range of " $< 2.3$ ". It has been held that where the claimed ranges and prior art do not overlap but are close enough that one skilled in the art would have expected them to have the same properties, a *prima facie* case of obviousness exists. Titanium Metals Corporation of America, 227 USPQ 773 (Fed Cir. 1985). Since this difference in overlapping ranges is so minimal, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the lens system constructed such that the first condition

of claim 1 was satisfied since the claimed range closely approximates the suggested value taught by Nanba.

Nanba further discloses one of the three lens element having aspherical surfaces on both faces (example 3); the satisfaction of the second condition of claim 3 (example 3 with  $T/fd = 1.35$ ). It is believed that the imaging lens system of Nanba would inherently satisfy the condition of claim 5, this being reasonably based upon the similarity in structure between the lens system of Nanba and that of the claimed invention. Nanba further discloses the satisfaction of the condition of claim 7 (example 3,  $V1d = 63.8$ ); an imaging unit operable to convert an image to an electrical image signal (abstract, column 1, lines 5-17, column 5, line 65 to column 6, line 20); and an optical low pass filter on the object side of the sensor (example 3 and corresponding Figure 5, column 5, line 65 to column 6, line 20). With respect to the first condition of claim 3, Nanba discloses  $2wd = 70.8$  (example 3) and therefore just outside of the claimed range of " $< 70$ ". It has been held that where the claimed ranges and prior art do not overlap but are close enough that one skilled in the art would have expected them to have the same properties, a *prima facie* case of obviousness exists. Titanium Metals Corporation of America, 227 USPQ 773 (Fed Cir. 1985). Since this difference in overlapping ranges is so minimal, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to have the lens system constructed such that the first condition of claim 3 was satisfied since the claimed range closely approximates the suggested value taught by Nanba.

***Allowable Subject Matter***

Claims 4 and 6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: with respect to the allowable claims, none of the prior art either alone or in combination disclose or teach of the claimed combination of limitations to warrant a rejection under 35 USC 102 or 103. Specifically, with respect to claim 4, none of the prior art either alone or in combination disclose or teach of the claimed imaging lens system specifically including, as the distinguishing feature in combination with the other limitations, the satisfaction of the four conditional expressions of claim 1 and additionally the satisfaction of the two conditional expressions of claim 4. Specifically, with respect to claim 6, none of the prior art either alone or in combination disclose or teach of the claimed imaging lens system specifically including, as the distinguishing feature in combination with the other limitations, the satisfaction of the four conditional expressions of claim 1 and additionally the satisfaction of the two conditional expressions of claim 6.

#### ***Examiner's Comments***

For applicant's information, in the International Search Report dated January 11, 2005 for PCT/Jp04/13566, four documents were listed as "X" references. All of these documents have been carefully reviewed by the examiner. With the exception of JP-2004/325713, none of the examples in these references satisfy all four claimed conditions of claim 1 and none of these references read on or make obvious

any of applicant's claims. Jp-2004/325713 is the same as Nanba 7,035,023 and would make obvious the above rejected claims for the same reasons above.

Shinohara patent number 6,977,779 and Amanai publication number 2005/0013017 are being cited herein to show imaging lens systems having some similar features to that of the claimed invention.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jordan M. Schwartz whose telephone number is (571) 272-2337. The examiner can normally be reached on Monday to Friday from 8:00 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ricky Mack can be reached on (571) 272-2333. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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Primary Examiner  
Art Unit 2873  
December 3, 2007